

**Environmental Restoration (ER) Project  
Cerro Grande Fire  
Accelerated Action Information Sheet**

**Potential Release Site (PRS) 02-003(a)  
Stack Gas Valve House**

*Technical Area (TA)-2, located in Los Alamos Canyon, housed several reactors, including the Omega West and Water Boiler Reactors. The reactors were shutdown, removed from the nuclear facilities list, and placed into the Laboratory's Decontamination and Decommissioning program.*

**PRS History:** PRS 2-003(a) is the former site of the stack gas valve house (Building 2-19) and associated waste line (identified by ER Project personnel as line 117) that were part of the gaseous effluent system associated with the Water Boiler Reactor. The Water Boiler Reactor operated from 1944 to 1974. The stack gas valve house contained valves, pumps, and a shielded collection tank for off-gases, which contained low levels of fission products such as cesium 137, strontium 90, and iodine 131. The valve house and line 117 were decommissioned in 1986. Building 2-19 and line 117 were contaminated with radioactivity, although no radioactivity was detected in the soil beneath them during decommissioning. There is no indication that any chemicals were stored or used in the valve house. Additional environmental sampling was performed in 1995 to determine whether environmental contaminants were present at the site of the former valve house. Results of field screening showed no detectable concentrations of organic chemicals and no alpha activity above instrument background. Beta/gamma activity was below instrument background in one case, and slightly above instrument background in another.

PRS 02-003(a) is not listed on the Hazardous and Solid Waste Amendments module of the Laboratory's Hazardous Waste



Facility permit. The ER Project has not proposed the site for no further action. No

samples were collected in the footprint of the former building TA-2-19, and existing knowledge indicates no residual risk at the site. Additional surface and subsurface soil samples need to be collected.

**Issues of Concern:** The area upstream of PRS 02-003(a) burned during the Cerro Grande fire. The intensity of the burn was low to moderate. The site does not have a surface component, and there is potential for erosion or scouring. There is no debris on the site that could enter the flood watercourse. This site does not contain structures that could interfere with or be impacted by flood mitigation efforts.

**Accelerated Action Status:** PRS 02-003(a) was evaluated after the Cerro Grande fire. Three boreholes have been completed, and 15 samples collected. Core screening showed elevated levels of beta/gamma activity were encountered in one borehole.

**Related Documents:**

"TA-2 Water Boiler Reactor Decommissioning (Phase I)," LANL Report LA-10890-MS, LANL, October 1986.

"Solid Waste Management Units Reports," Vol. I of IV (TA-0 through TA-9), LANL Report LA-UR-90-3400, revised November 1990.

"RFI Work Plan for Operable Unit 1098 (TA-2, 41)," LANL Report LA-UR-92-3825, June 1993